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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,501	04/06/2001	Thomas Brumm	112740-208	5729
29177	7590	03/22/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			YAO, KWANG BIN	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/827,501	Applicant(s) ^{CA} BRUMM ET AL.	
	Examiner Kwang B. Yao	Art Unit 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/3/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 12, 13, 15-23, 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Mannering et al. (US 6,137,839).

Mannering et al. discloses a telecommunication system comprising the following features: regarding claim 1, a method for processing signaling (Fig. 3c, PACKETIZER 360,

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column 10, 17-31) data and for controlling connections in a packet-switching communications network (Fig. 2b, Internet), wherein the packet-switching communications network (Fig. 2b, Internet) includes at least one subscriber (Fig. 3c, CUSTOMER PREMISES), the method comprising the steps of: controlling, via a network element (Fig. 2b, 3c, CENTRAL OFFICE 220), a concentrator (Fig. 3c, MDSL CONCENTRATOR 360) interface using at least one connecting unit such that the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) makes resources available to it; transmitting signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) data for subscriber (Fig. 3c, CUSTOMER PREMISES) signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) of the subscriber (Fig. 3c, CUSTOMER PREMISES) between at least one packed control unit of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) and the connecting unit of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) via a message distribution system of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220); converting the signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) data of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) by the packet control unit (Fig. 2b, 3c, CENTRAL OFFICE 220) into signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) packets of the packet-switching communications network (Fig. 2b, Internet) and vice versa; and transmitting the signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) packets between the packet control unit (Fig. 2b, 3c, CENTRAL OFFICE 220) and the subscriber (Fig. 3c, CUSTOMER PREMISES); regarding claim 2, wherein the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) is a switching office of a circuit-switching telecommunications network; regarding claim 3, administering (Fig. 1d, MANAGEMENT/MAINTENANCE CONTROL) and operating the subscriber (Fig. 3c, CUSTOMER PREMISES) in the network element (Fig. 2b, 3c, CENTRAL

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OFFICE 220) as a subscriber (Fig. 3c, CUSTOMER PREMISES) which is connected using the concentrator (Fig. 3c, MDSL CONCENTRATOR 360) interface; and using the resources made available to the concentrator (Fig. 3c, MDSL CONCENTRATOR 360) interface for the subscriber (Fig. 3c, CUSTOMER PREMISES); regarding claim 4, wherein functions of one of a main line and an extension are available to the subscriber (Fig. 3c, CUSTOMER PREMISES) in the network element (Fig. 2b, 3c, CENTRAL OFFICE 220); regarding claim 12, wherein at least one of functions of the concentrator (Fig. 3c, MDSL CONCENTRATOR 360) interface for connecting subscribers (Fig. 3c, CUSTOMER PREMISES) of the packet-switching communications network (Fig. 2b, Internet) which are not required are deactivated, and messages of the functions are suppressed in the network element (Fig. 2b, 3c, CENTRAL OFFICE 220); regarding claim 13, wherein subscribers (Fig. 3c, CUSTOMER PREMISES) of the circuit-switching communications network are assigned to only one concentrator (Fig. 3c, MDSL CONCENTRATOR 360) interface of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) which is provided for connecting subscribers (Fig. 3c, CUSTOMER PREMISES) of the circuit-switching communications network; regarding claim 15, actuating, via the network element (Fig. 2b, 3c, CENTRAL OFFICE 220), a plurality of concentrator (Fig. 3c, MDSL CONCENTRATOR 360) interfaces to which a respective plurality of subscribers (Fig. 3c, CUSTOMER PREMISES) can be assigned; regarding claim 16, exchanging the signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) of the subscriber (Fig. 3c, CUSTOMER PREMISES) of the packet-switching communications network (Fig. 2b, Internet) between subscribers (Fig. 3c, CUSTOMER PREMISES) and the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) using a physical interference of one of the packet control unit (Fig. 2b, 3c, CENTRAL OFFICE

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220) and the message router system of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220); regarding claim 17, assigning a call number to the subscriber (Fig. 3c, CUSTOMER PREMISES) in the network element (Fig. 2b, 3c, CENTRAL OFFICE 220), wherein the subscriber (Fig. 3c, CUSTOMER PREMISES) in the packet-switching communications network (Fig. 2b, Internet) has a subscriber (Fig. 3c, CUSTOMER PREMISES) address, and the assignment between the subscriber (Fig. 3c, CUSTOMER PREMISES) address and the call number is made using a control unit; regarding claim 18, wherein the control unit is a data processing system which is assigned to the network element (Fig. 2b, 3c, CENTRAL OFFICE 220); regarding claim 19, wherein the subscriber (Fig. 3c, CUSTOMER PREMISES) is administered as a subscriber (Fig. 3c, CUSTOMER PREMISES) with an ISDN (FIG. 2B, FIG. 3D, ISDN) basic access in the network element (Fig. 2b, 3c, CENTRAL OFFICE 220); regarding claim 20, wherein the ISDN (FIG. 2B, FIG. 3D, ISDN) basic access is one of an ISDN (FIG. 2B, FIG. 3D, ISDN) basic access in point-to-point configuration or an ISDN (FIG. 2B, FIG. 3D, ISDN) basic access in point-to-multipoint configuration; regarding claim 21, transmitting the user data using the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) when there is a connection between the subscriber (Fig. 3c, CUSTOMER PREMISES) and a second subscriber (Fig. 3c, CUSTOMER PREMISES); regarding claim 22, transmitting the user data directly between the subscribers (Fig. 3c, CUSTOMER PREMISES) using the packet-switching communications network (Fig. 2b, Internet) when there is a connection between the subscriber (Fig. 3c, CUSTOMER PREMISES) and a further subscriber (Fig. 3c, CUSTOMER PREMISES) of the packet-switching communications network (Fig. 2b, Internet); regarding claim 23, wherein the packet-switching communications network (Fig. 2b, Internet) is an

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Internet-protocol-based network; regarding claim 25, a network element (Fig. 2b, 3c, CENTRAL OFFICE 220) for processing signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) data and for controlling connections of subscribers (Fig. 3c, CUSTOMER PREMISES) of a packet-switching communications network (Fig. 2b, Internet), comprising: a concentrator (Fig. 3c, MDSL CONCENTRATOR 360) interface which is controlled using at least one connecting unit of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220), the concentrator (Fig. 3c, MDSL CONCENTRATOR 360) interface making available resources of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220); a packet-switching communications network (Fig. 2b, Internet) with at least one subscriber (Fig. 3c, CUSTOMER PREMISES); and at least one packet control unit (Fig. 2b, 3c, CENTRAL OFFICE 220) which connects a message router system of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) to the connecting unit, signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) data for subscriber (Fig. 3c, CUSTOMER PREMISES) signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) being transmitted between the packet control unit (Fig. 2b, 3c, CENTRAL OFFICE 220) of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) and the connecting unit of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) via the message router system of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220), the signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) data of the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) being converted into signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) packets of the packet-switching communications network (Fig. 2b, Internet) by the packet control unit (Fig. 2b, 3c, CENTRAL OFFICE 220), and vice versa, and the signaling (Fig. 3c, PACKETIZER 360, column 10, 17-31) packets being transmitted between the packet control unit (Fig. 2b, 3c, CENTRAL OFFICE 220) and the

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subscriber (Fig. 3c, CUSTOMER PREMISES); regarding claim 26, wherein the network element (Fig. 2b, 3c, CENTRAL OFFICE 220) contains both units of a conventional switching office (Fig. 2b, PSTN) of a line-switching communications network and at least one packet control unit (Fig. 2b, 3c, CENTRAL OFFICE 220); regarding claim 27, wherein the packet-switching communications network (Fig. 2b, Internet) is an Internet-protocol-based network. See column 7-42.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mannering et al. (US 6,137,839) in view of Cooper et al. (US 6,181,710).

Mannering et al. discloses the claimed limitations above. Mannering et al. does not disclose the following features: regarding claim 5, wherein the concentrator interface is administered and operated as at least one of a V5.2 interface, a TR303 interface, a V93 interface and a V95 interface. Cooper et al. discloses the following features: regarding claim 5, wherein the concentrator interface is administered and operated as at least one of a V5.2 interface, a TR303 interface, a V93 interface and a V95 interface, see column 1, lines 14-19. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Mannering et al. by using the features, as taught by Cooper et al., in order to provide

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an efficient data communication system for handling more traffic. See Cooper et al., column 1, lines 14-17.

6. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mannering et al. (US 6,137,839) in view of Bossemeyer, Jr. et al. (US 6,285,671).

Mannering et al. discloses the claimed limitations above. Mannering et al. further discloses the following features: regarding claim 7, wherein the interface unit is a media gateway which converts the user data bidirectionally between packet format and TDM format (column 9, lines 45-53); regarding claim 8, controlling the interface unit via line trunk groups of the network element which control the concentrator interface (column 9, lines 23-53). Mannering et al. does not disclose the following features: regarding claim 6, bidirectionally transmitting, via one of PCM connections and SDH connections of the concentrator interface, user data to an interface unit which converts the user data between a format which is customary in the packet-switching communications network and a format which is customary in the circuit-switching communications network. Bossemeyer, Jr. et al. discloses a communication system comprising the following features: regarding claim 6, bidirectionally transmitting, via one of PCM connections and SDH connections of the concentrator interface, user data to an interface unit which converts (Fig. 5, IWU 74) the user data between a format which is customary in the packet-switching communications network and a format which is customary in the circuit-switching communications network (column 4, lines 23-48; column 6, lines 58-67). It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Mannering et al. by using the features, as taught by Bossemeyer, Jr. et al., in order to

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provide a higher capacity data transmission service. See Bossemeyer, Jr. et al., column 1, lines 59-61.

7. Claims 9-11, 14, 24, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mannering et al. (US 6,137,839) in view of Aravamudan et al. (US 6,301,609).

Mannering et al. discloses the claimed limitations above. Mannering et al. does not disclose the following features: regarding claim 9, characterizing the concentrator interface in a database of the network element as a concentrator interface for connecting subscribers of the packet-switching communications network; regarding claim 10, routing the subscriber in a database of the network element as a subscriber of the packet-switching communications network; regarding claim 11, wherein the concentrator interface for connecting subscribers of the packet-switching communications network can be assigned only subscribers which are subscribers of the packet-switching communications network; regarding claim 14, wherein assignment of the subscribers to at least one the concentrator interfaces of the network element and connecting units of the network element is carried out in a database of the switching office using an operator interface of the network element; regarding claim 24, wherein the signaling of the subscriber is carried out in accordance with one of the H.323 Standard and the SIP Standard; regarding claim 28, wherein the signaling of the subscriber is carried out in accordance with one of the H.323 Standard and the SIP Standard. Aravamudan et al. discloses a communication system comprising the following features: regarding claim 9, characterizing the concentrator (FIG. 3, GATEWAY 186, column 4, lines 6-25) interface in a database (OTHER DATA 170, PERSONAL DATA AND RULES 168) of the network element as a concentrator (FIG. 3, GATEWAY 186, column 4, lines 6-25) interface for connecting subscribers of the packet-

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switching communications network (FIG. 1, PACKET 122); regarding claim 10, routing the subscriber in a database (OTHER DATA 170, PERSONAL DATA AND RULES 168) of the network element as a subscriber of the packet-switching communications network (FIG. 1, PACKET 122); regarding claim 11, wherein the concentrator (FIG. 3, GATEWAY 186, column 4, lines 6-25) interface for connecting subscribers of the packet-switching communications network (FIG. 1, PACKET 122) can be assigned only subscribers which are subscribers of the packet-switching communications network (FIG. 1, PACKET 122); regarding claim 14, wherein assignment of the subscribers to at least one the concentrator (FIG. 3, GATEWAY 186, column 4, lines 6-25) interfaces of the network element and connecting units of the network element is carried out in a database (OTHER DATA 170, PERSONAL DATA AND RULES 168) of the switching office using an operator interface of the network element; regarding claim 24, wherein the signaling of the subscriber is carried out in accordance with one of the H.323 Standard and the SIP Standard (FIG. 3, H.323/SIP GATEWAY); regarding claim 28, wherein the signaling of the subscriber is carried out in accordance with one of the H.323 Standard and the SIP Standard (FIG. 3, H.323/SIP GATEWAY). See column 3-12. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Mannering et al. by using the features, as taught by Aravamudan et al., in order to provide an efficient data communication system by having a unified service platform. See column 2, lines 25-28.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Mauger et al. (US 6,507,577) discloses a voice over IP network architecture.

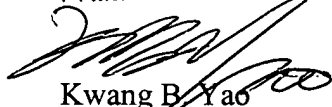
Koenig et al. (US 6,351,452) discloses a telecommunication device.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO
PRIMARY EXAMINER



Kwang B. Yao
March 16, 2005